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**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY**

ATOTECH USA, INC., et al.,

Plaintiff,

vs.

MacDERMID, INC.

Defendant.

Civil Action No.: 05-5517(FSH)
Hon. Faith S. Hochberg, USDJ
Hon. Patty Shwartz, U.S.M.J.

**MEMORANDUM OF LAW IN SUPPORT OF
DEFENDANT'S MOTION FOR SUMMARY JUDGMENT**

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I. INTRODUCTION

The Defendant, MacDermid, Inc. (“MacDermid”), has moved for summary judgment on issues of anticipation, obviousness, indefiniteness, inequitable conduct, and non-infringement as it relates to plaintiffs’ allegations of patent infringement. MacDermid has also moved for summary judgment with respect to certain trade secret allegations concerning formulations.

In the Amended Complaint, the plaintiffs, Atotech USA, Inc. and Atotech Deutschland GmbH (collectively “Atotech”), allege that by selling ChromKlad 2500, MacDermid induces and contributes to infringement of U.S. Patent Nos. 5,176,813 (the ‘813 Patent) and 5,453,175 (the ‘175 Patent) (collectively the “Patents-In-Suit”). Atotech also alleges that it possesses “certain proprietary trade secret information related to its HEEF 25 product line” and that MacDermid has allegedly misappropriated these “HEEF Trade Secrets.”

In the operative Answer, MacDermid has alleged, *inter alia*, that the Patents-In-Suit are: (i) invalid as anticipated under 35 U.S.C. § 102, (ii) invalid as obvious under 35 U.S.C. § 103, (iii) invalid for indefiniteness of claims under 35 U.S.C. § 112,¹ (iv) unenforceable as a result of inequitable conduct and unclean hands, and (v) not infringed by MacDermid’s sale of ChromKlad 2500.

¹ With respect to this defense, MacDermid respectfully incorporates the arguments found in its Opening Markman brief filed contemporaneously herewith.

The material facts underlying MacDermid's Motion for Summary Judgment are not in dispute, leaving only a legal determination for this Court as to whether MacDermid is entitled to judgment as a matter of law.

II. LEGAL STANDARD FOR SUMMARY JUDGMENT

Summary Judgment is proper when there is no genuine issue as to any material fact, and the moving party is entitled to judgment as a matter of law. FRCP 56(a). A movant should be awarded summary judgment on all properly supported issues, except those for which the nonmovant has provided evidence to show that a genuine issue of material fact remains. Celotex Corp. v. Catrett, 477 U.S. 317, 324 (1986). The existence of some factual dispute does not defeat a properly supported motion for summary judgment; rather, the disputed factual issue must be material. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 252 (1986).

III. LEGAL ARGUMENT

A. THE CLAIMS OF THE PATENTS-IN-SUIT ARE INVALID PURSUANT TO 35 U.S.C. § 102(b).

35 U.S.C. § 102 provides in pertinent part, as follows:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country ... more than one year prior to the date of the application for patent in the United States

Determining whether a claimed invention is anticipated requires a two-step analysis. Akamai Tech., Inc. v. Cable & Wireless Internet Serv., 344 F.3d 1186,

1192 (Fed. Cir. 2003). First, the Court must interpret the claims as a matter of law.² Id. Second, the Court must determine whether the prior art discloses each limitation of the claimed invention “either expressly or inherently.” Id.

1. The claims of the Patents-In-Issue are expressly and inherently anticipated by the LPW patent applications.

The claims of the Patents-In-Suit are expressly and inherently anticipated by the LPW applications.³ The LPW applications explicitly disclose the preferred chromium electroplating bath of the Patents-at-Issue, namely chromic acid, sulfuric acid and MDSA. Most notably, Examples 5 to 8 disclose MDSA formulations that anticipate the claims of the Patents-In-Suit. Further, the LPW applications teach plating conditions that anticipate the Patents-In-Suit. For example, Example No. 5 discloses the use of an MDSA plating bath, with a bath temperature of 55° C and a current density of 50 amps per square decimeter, resulting in a cathode efficiency of 25.7%. The scope of this prior art is undisputed. (Ex. 42, 160-66; 169-74; 199-200). Atotech, nevertheless, contends that these undisputed teachings do not anticipate the Patents-in-Suit for two reasons.

² With respect to this step, MacDermid relies upon its Markman briefing.

³ MacDermid notes that similar arguments can be made in view of the ‘481 Patent.

[REDACTED]

will limit its detailed discussion to the LPW applications because these references contain specific examples of MDSA plating baths, and thus most clearly demonstrate the invalidity of the Patents-In-Suit.

On the issue of anticipation, Atotech's Rule 30(b)(6) representative testified that the plaintiffs adopted the position of their expert, Frank Altmayer. (Ex. 40, 147-150). In turn, Mr. Altmayer testified that the claims of the Patents-at-Issue were not anticipated by the LPW applications because: (1) the references do not explicitly disclose the use of a lead anode, and (2) the references do not explicitly teach the claim limitation – "in the substantial absence of a corrosion-producing monosulfonic acid."⁴ Neither contention raises a genuine issue of material fact precluding summary judgment. The two issues will be addressed *in seriatim*.

a. The use of a lead anode does not distinguish the claims of the Patents-In-Suit from the prior art.

Atotech cannot succeed in its argument that the claimed invention is novel as a result of the limitation setting forth "the use of a lead anode" because: (1) Atotech is bound by admissions concerning the prior art use of lead anodes, and (2) the use of lead anodes was so well known to someone skilled in the art that it is inherent in the LPW references.

i. Atotech is Barred from Contending that the Utilization of a Lead Anode is a Distinguishing Feature of the Patents-in-Suit.

Admissions made by a patent applicant can and should be used when determining invalidity. See Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1570 (Fed. Cir. 1988). Here, there is no genuine issue of fact that Atotech

⁴ Notably, Mr. Altmayer concedes that all other claim limitations are met by the LPW patent applications. (Ex. 42, 249).

made binding admissions that the use of a lead anode was known in the prior art. Atotech, therefore, cannot now claim that the use of a lead anode distinguishes the claimed invention from the prior art.

(1) *Atotech is bound by the admission in the specification of the Patents-in-Suit.*

“[A] statement in a patent that something is in the prior art is binding on the applicant and patentee for determinations of anticipation and obviousness.” *Id.* In the present case, the written specification provides:

[Lead anodes] are well known to those skilled in the art, and as such form no part of this invention.

(Ex. 11, Col. 2, L. 9-16; Ex. 12, Col. 2, L. 12-22).

Atotech is bound by this admission and cannot now contend that the use of a lead anode constitutes a novel feature of the claimed invention. *See Constant*, 848 F.2d at 1569-70; *Proctor & Gamble Co. v. Nabisco Brands, Inc.*, 711 F. Supp. 759 (D. Del. 1989).

(2) *Atotech is similarly bound by its admission in the prosecution history of the Patents-in-Suit.*

A patentee's representation during prosecution concerning prior art constitutes a binding admission and should “be accepted at face value” during subsequent litigation over the patent. *In re Nomiya*, 509 F.2d 566, 570-71 (C.C.P.A. 1974); *Tyler Refrigeration Corp. v. Kysor Indus. Corp.*, 601 F. Supp. 590, 600-01 (D. Del. 1985). As explained in *In re Nomiya*,

[T]he basic proposition that a statement by an applicant, whether in the application or other papers submitted during prosecution, that certain matter is “prior art” to him, is an admission that the matter is prior art for *all* purposes, whether or not a basis in §102 can be found for its use as prior art.

In re Nomiya, 509 F.2d at 571, n.5 (emphasis in original).

In the present case, the applicant responded to an Examiner’s inquiry, in relevant part, as follows:

[L]ead anodes, as defined in the specification in this case, are, and for many years have been, used in conventional plating processes, and are so well known that one skilled in the art thinks of them only when a problem arises.

(Ex. 13, B4) (emphasis added).

This admission is binding on Atotech for all purposes, including the Court’s anticipation and obviousness analysis.

(3) By using a Jepson claim in the ‘175 Patent, Atotech explicitly admitted that the use of lead anodes was well-known prior art.

A patent claim that “first describes the scope of the prior art and then claims an improvement over the prior art” is known as a “Jepson” claim. Dow Chem. Co. v. Sumitomo Chem. Co., Ltd., 257 F.3d 1364, 1368 (Fed. Cir. 2001). Proper interpretation of such a claim requires that the preamble be treated as admitted prior art. See Rowe v. Dror, 112 F.3d 473, 479 (Fed. Cir. 1997).

In the present matter, Claim 1 of the ‘175 Patent is a Jepson claim. As with all Jepson claims, the text of the claim appearing before the word “improvement”

is admitted prior art. See 37 C.F.R. § 175(e); Dow Chem. Co., 257 F.3d at 1368; Rowe, 112 F.3d at 479. Therefore, the preamble admits that the use of lead anodes was known in the prior art.

In summary, Atotech is bound by each of these admissions and cannot now create a genuine issue of material fact through the use of a retained expert.

- ii. The use of a lead anode is also inherent in the prior art references.

Even if Atotech were not bound by these admissions, the prior art references anticipate the Patents-in-Suit because they inherently encompass the use of a lead anode. “Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates.”

MEHL/Biophile Int’l Corp. v. Milgraum, 192 F.3d 1362, 1365 (Fed. Cir. 1999).

The issue before the Court is whether the disclosure of a chromium electroplating process in the LPW applications (and the ‘481 patent) inherently encompassed the use of lead anodes. The Federal Circuit’s application of this aspect of the inherency doctrine in Telemac Cellular is highly instructive on this point.

In Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1319 (2001), the Federal Circuit affirmed a granting of summary judgment based on inherent anticipation. The patent claimed a phone system that automatically debits the cost of each call from a credit account stored within the phone in accordance with a “complex billing algorithm.” Id. at 1319-20. The Court construed

“complex billing algorithm” to require storage of phone rates for, at a minimum, local, long distance, international and roaming calls. Id. at 1329.

The defendant filed a summary judgment motion alleging that claims of the patent-at-issue were anticipated by the “Wittstein patent.” Id. at 1321. To anticipate, the telephone described by the Wittstein patent had to be capable of generating a Call Detail Record specifying the charges corresponding to local, long distance, international and roaming calls. Id. The Court acknowledged that the four rate categories included in the “complex billing algorithm” were not expressly described in Wittstein, but found those features inherent in the Wittstein patent based on extrinsic evidence. Id. at 1327. On appeal, the Federal Court reaffirmed that extrinsic evidence was properly considered and, then, found that the Court’s inherency determination was supported by the plaintiff’s invention disclosure, a second patent owned by the plaintiff, and by admissions of the inventor. Id. at 1328-30.

As in Telemac, this Court may properly rely upon extrinsic evidence, including Atotech’s documents, related patents and inventors’ admissions, to determine that the disclosure of a hard chromium electroplating process in the LPW applications necessarily encompassed the use of a lead anode. First, it is undisputed that the hard chromium electroplating process disclosed by the LPW

applications only works with an anode. Thus, there must be some anode necessarily included in the LPW applications.

Second, it is undisputed that lead anodes have been used in hard chromium electroplating since the 1920's. Atotech's expert detailed the "very good reasons" that lead anodes have been used for almost 100 years. Additionally, Atotech's expert admitted that in 1985, he, as someone skilled in the art, knew that there were these "very good reasons" for using a lead anode and that a lead anode could be used in the LPW process.

Third, during the research underlying the '481 Patent, it is undisputed that Newby had an LPW solution and that he used a lead anode to run tests with that solution. Therefore, Newby, by his own actions in 1985, admitted that a lead anode was the anode choice of someone skilled in the art when operating an electroplating process with the LPW solution.

Fourth, Newby admitted that the use of lead anodes is so well-known that when he reviews hard chromium literature, he "assumes" that lead anodes are used unless it is explicitly stated otherwise. Indeed, Newby averred that he "believed" that a lead anode was used in the LPW experiments, despite the fact that the anode and the anode material were not described.

Fifth, Chessin testified that the word "anode" was not found in the '481 Patent because it was such a "generality that one didn't worry about it" and further

that the use of lead anodes was “rife.” Chessin also wrote in 1982, “chromium-plating baths are operated with insoluble lead alloy anodes” and “insoluble antimonial lead ... and lead-tin alloy ... are the most commonly used anode materials in chromium-plating solutions.” Notably, Atotech has agreed with the accuracy of Chessin’s writings concerning lead anodes.

Sixth, Atotech is the owner of related patents that acknowledge lead anodes were well known in chromium electroplating. In U.S. Patent No. 4,786,378, Atotech reported that chromium plating baths “almost invariably employ lead or lead alloy anodes.” (Ex. 9, Col. 1, L. 14-17). In U.S. Patent No. 4,810,337, Atotech stated that the ‘481 plating baths “almost invariably employ lead or lead alloy anodes.” (Ex. 10, Col. 1, L. 19-28).

Finally, the Patents-in-Suit provide that lead anodes “are well known to those skilled in the art” and, further, contain a Jepson claim that admits the use of lead anodes was prior art. Also, during the prosecution history, Newby advised that lead anodes “are so well known that one skilled in the art thinks of them only when a problem arises.”

Therefore, the evidence leaves no room for a genuine dispute as to whether the use of a lead anode was necessarily encompassed within LPW’s disclosure of a hard chromium electroplating process. It is undisputed that one skilled in the art would have known: (1) an anode was needed for the LPW process to work, (2)

there were “very good reasons” for using a lead anode in that process, and (3) lead anodes were “almost invariably employed.”

b. The LPW applications meet the limitation “in the substantial absence of a corrosion-producing monosulfonic acid.”

As detailed in MacDermid’s Markman brief, this claim limitation is indefinite because MSA’s upper limit presents a “moving target.” In contrast, there is no dispute concerning the lower limit of this claim limitation. Specifically, the parties agree that a plating bath without any MSA satisfies this claim limitation. (Ex. 42, 234-35). Additionally, the parties agree that the LPW applications contain four examples that describe plating bath chemistries that explicitly include MDSA and explicitly do not include MSA. (Id., 200).

Rather oddly, however, Atotech has taken the position that even though MSA is not specifically identified in the MDSA examples, there is a “possibility” that MDSA may contain MSA impurities. (Id., 234-35). Atotech further claims that unlike the Patents-in-Suit, the LPW applications do not “teach” that a monosulfonic acid must be substantially absent. (Id., 248). The Court should reject both efforts by Atotech and its expert to avoid anticipation.

i. The “possibility” of MSA in the MDSA examples.

First, Atotech’s expert admitted that he did not test his “impurity” theory and that it is only a “possibility” and not a probability. Such speculation is inadmissible and cannot avoid summary judgment. Fedorczyk v. Caribbean Cruise

Lines, Ltd., 82 F.3d 69, 75 (3d Cir. 1996) (excluding expert conclusion that was “based on pure speculation”).

Moreover, it is axiomatic that anticipation is adjudged by the written words of the prior art disclosure, and “negative limitations” of a claim are met by the absence of a teaching on the topic. Upsher-Smith Labs. v. PamLab, LLC, 412 F.3d 1319, 1322 (Fed. Cir. 2005). The Upsher-Smith decision is instructive.

There, the patent claims covered vitamin compositions with a “negative limitation” that provided the compositions must be “essentially free of antioxidants.” The prior art disclosed the same compositions and taught that the compositions could “optionally include” antioxidants. The District Court held that the patent claims were anticipated. The Federal Circuit affirmed, reasoning:

A century-old axiom of patent law holds that a product “which would literally infringe if later in time anticipates if earlier.” The European Application’s “optional inclusion” of antioxidants teaches vitamin supplement compositions that both do and do not contain antioxidants. Thus, because compositions made according to the European Application that do not contain anti-oxidants would infringe the asserted claims of the ‘624 and ‘646 patents, those compositions anticipate the asserted claims *despite no express teaching to exclude the antioxidants* in the European Application.

Upsher-Smith, 412 F.3d at 1322 (citations omitted) (emphasis added).

Application of Upsher-Smith to the present matter is straightforward. The LPW applications contain examples where MDSA is expressly included without any mention of MSA. Therefore, according to Upsher-Smith, the LPW’s MDSA

examples meet the negative limitation of the Patents-in-Suit, despite the fact they contain “no express teaching to exclude” a monosulfonic acid.⁵

ii. The lack of “teaching” in the LPW reference that the MDSA bath did not corrode lead anodes.

Atotech contends that the LPW applications are not anticipatory because there is no “teaching” that MSA must be “substantially absent” to achieve the benefits of minimizing lead anode corrosion. This contention also falters as a matter of law. The Federal Circuit has consistently affirmed the principle that the discovery of a new property of a known composition or process does not constitute a patentable invention. Abbott Lab. v. Baxter Pharms., 471 F.3d 1363, 1366-68 (Fed. Cir. 2006); SmithKline Beecham Corp. v. Apotex Corp., 403 F.3d 1331, 1343-44 (Fed. Cir. 2005); Schering Corp. v. Geneva Pharms., Inc., 339 F.3d 1373, 1378-80 (Fed. Cir. 2003); In re Cruciferous Sprout Litig., 301 F.3d 1343, 1349-50 (Fed. Cir. 2002); Atlas Powder Co. v. Ireco Inc., 190 F.3d 1342, 1347-49 (Fed. Cir. 1999); Titanium Metals Corp. of Am. v. Banner, 778 F.2d 775, 782 (Fed. Cir. 1985).

⁵ If this were not the case, then anyone could take a known composition and secure patent protection for the composition by including a negative limitation. The absurdity of Atotech’s position is demonstrated by a simple hypothetical. The prior art discloses a profitable process utilizing a chemical composition consisting of chemicals A, B and C. Surprisingly, however, the prior art does not explicitly exclude the addition of chocolate milk to the chemical composition. If Atotech’s vision of patent law were correct, then MacDermid’s counsel could validly obtain a patent on the profitable process using chemicals A, B and C “in the substantial absence of” chocolate milk. This cannot be the law.

Novelty lies at the heart of the patent system. Therefore, “[t]he discovery of a new property or use of a previously known composition, even when that property and use are unobvious from prior art, can not impart patentability to claims to the known composition.” Titanium Metals, 778 F.2d at 782. The public must remain free to make, use, or sell prior art compositions, regardless of whether they understand their complete makeup or the underlying scientific principles that allowed them to operate. Schering Corp., 339 F.3d at 1380. The doctrine of inherency works to ensure this basic principle of patent law. Id.

The Federal Circuit’s decisions in Abbott Labs and Titanium Metals are factually indistinguishable from this matter. In Titanium Metals, the patent claimed a titanium based alloy that was “characterized by good corrosion resistance in hot brine environments.” Id. at 776. The prior art disclosed the same titanium based alloy, but failed to disclose that the alloy had corrosion-resistant properties. The Federal Circuit held that the claim was anticipated by the prior art, concluding, “it is immaterial, on the issue of their novelty, what inherent properties the alloys have or whether these applicants discovered certain inherent properties.” Id. at 782. The Federal Circuit noted: “Congress has not seen fit to permit the patenting of an old alloy, known to others through printed publication, by one who has discovered its corrosion resistance or other useful properties...” Id.

Similarly, in Abbott Labs, the Federal Circuit reaffirmed the principles of inherent anticipation. The patent-at-issue included claims that covered mixing water with sevoflurane for the purpose of protecting the sevoflurane from degradation. Abbott, 471 F.3d at 1365. According to the patentee, the deliberate addition of water to sevoflurane ran counter to conventional wisdom and his discovery entitled him to patent protection. Id. The prior art disclosed a composition of water-saturated sevoflurane, but failed to describe the protective attributes of water when mixed with sevoflurane. Id. at 1367. The District Court, there, rejected defendant's inherency argument. The District Court reasoned that the "purposes" of the prior art and patent-at-issue were different, and therefore, a finding of inherent anticipation was precluded under the Federal Circuit's decision in Bristol-Meyers Squibb. Id. at 1366. The Federal Circuit, however, reversed.

The Federal Circuit first reiterated that the "purpose-based distinction" of Bristol-Myers Squibb was only applicable to process claims, and therefore, reversed the lower court's application of the distinction to composition claims. Second, the Court rejected the District Court's application of the "purpose-based distinction" to the process claims of the patent-at-issue. The Court reasoned:

Both the '211 and the '176 patents disclose methods which help ensure that sevoflurane will be of high purity at the time it is administered to patients. All of the steps are thus disclosed in the '211 patent in furtherance of the same purpose: the delivery of safe, effective sevoflurane anesthetic. All that is contributed by the method claims of the '176 patent is the recognition of a new property of the

prior art process. We hold today, as we did in *Bristol-Myers Squibb*, that “the claimed process here is not directed to a new use; it is the same use.”

Id. at 1369 (emphasis added).

In the present matter, the LPW applications disclose a process whose purpose is to electroplate hard chromium onto a metal substrate. The purpose of the process claimed in the Patents-In-Suit is identical. Therefore, the process of the Patents-in-Suit is not directed to a new use – it is the same use. Moreover, as in Abbott Labs, all that is contributed by the claims of the Patents-In-Suit is the recognition that MSA is “corrosion-producing,” whereas MDSA is not.

Newby’s discovery of an inherent benefit of a known process does not entitle him to a new patent. As pronounced by the Federal Circuit, to rule otherwise would effectively prohibit others from practicing the prior art.

2. The claims of the Patents-In-Suit are anticipated by the LPW Anode application.

An English translation of the German LPW Anode application containing Newby’s handwriting was found in Atotech’s files, but was never produced to the USPTO. Instead, Newby elected to describe the LPW Anode application in his patent application. Newby’s description, however, was materially incomplete. Specifically, Newby reported:

Another attempted solution to the problem has been the investigation of materials which are resistant to attack by bath compositions containing MSA. For instance, in German application 3,625,187A,

filed on Jul. 25, 1986, anodes made of lead containing up to about 9% by weight of antimony or about 1% by weight of palladium, with or without small amounts of tin, silver and/or selenium are reported to show "good results" when used in functional chromium electroplating processes carried out at 55° C, with a cathodic current density in the range of 30 to 32 amperes per square decimeter (a.s.d.) and an anodic current density of from 25 to 30 a.s.d.

(Ex. 11, Col. 2, L29-42).

Newby's description failed to include the portions of the LPW Anode disclosure that actually anticipate the claims of the Patents-In-Suit. Specifically, the LPW Anode application describes the following process:

2. Use of lead-containing anodes with a content of 0.1 to 9 wt.%, preferably 0.5 to 5 wt.%, antimony and/or 0.01 to 1 wt.%, preferably 0.02 to 0.05 wt.%, palladium and, if necessary, in addition 0.01 to 1 wt.%, preferably 0.02 to 0.05 wt.%, tin, silver and/or selenium for hard-chromium electrolytes containing alkyl sulfonic acids.

(Ex. 7, 328).

First, it is undisputed that the "lead-containing anodes" described by the LPW Anode application fall within the definition of "lead anode." (Ex. 42, 295-96). Further, Newby testified: "Methane disulfonic acid, as per my understanding, that is an alkyl sulfonic acid." (Ex. 47, 93).

Second, the LPW Anode application goes on to specify: "Hard-chromium electrolytes containing alkyl sulfonic acids are known from the German Pat. Appl. 34 02 554." Notably, "German Pat. Appl. 34 02 554" is the LPW application discussed above, that contains four examples describing MDSA plating baths.

Therefore, this passage from the LPW Anode application confirms that its description of “alkyl sulfonic acids” includes MDSA, and that Newby’s understanding on the issue was correct.

Third, the cited passage operates to “incorporate by reference” the teachings of the LPW patent application. Advanced Display Sys. Inc v. Kent State Univ., 212 F.3d 1272, 1282 (Fed. Cir. 2000). “[M]aterial not explicitly contained in the single, prior art document may still be considered for purposes of anticipation if that material is incorporated by reference into the document.” Id. To incorporate by reference, the host document must identify with detailed particularity what specific material it incorporates and clearly indicate where that material is found in the various documents. Id. Whether and to what extent material has been incorporated by reference is a question of law. Id. at 1283. Here, the incorporated material (the bath compositions) and the location of the material (German Pat. Appl. 34 02 554) are specifically identified by the host document.

Therefore, there is no question that the LPW Anode application describes a chromium electroplating process that uses a lead anode with a plating bath consisting of chromic acid, sulfuric acid and MDSA. This teaching is the claimed invention of the Patents-In-Suit. Yet, the Examiner was unaware of its existence because of Newby’s materially incomplete description in the patent application, coupled with his withholding of an English translation in his possession.

Based on the opinions of Atotech's expert, MacDermid expects that Atotech will argue that the LPW Anode application is not anticipatory because the reference "teaches away" from the claimed invention. Admittedly, the LPW Anode application does teach that the solution to lead anode corrosion lies within the composition of the lead anode. However, whether the prior art "teaches away" from the claimed invention is irrelevant to the Court's analysis of anticipation under Section 102(b). See Bristol-Myers Squibb Co. v. Ben Venue Labs, Inc., 246 F.3d 1368, 1378 (Fed. Cir. 2001) ("the question whether a reference 'teaches away' from the invention is inapplicable to an anticipation analysis").

B. THE CLAIMS OF THE PATENTS-IN-SUIT ARE INVALID PURSUANT TO 35 U.S.C. § 103.

35 U.S.C. § 103 forbids issuance of a patent when:

[T]he differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

35 U.S.C. § 103 (a).

Obviousness is a legal conclusion. Aktiebolaget Karlstads Mekaniska Werkstad v. Int'l Trade Com'n, 705 F.2d 1565, 1575 (Fed. Cir. 1983). To determine whether a patent is obvious, a court must consider: (i) the scope and content of the prior art to which the invention pertains; (ii) the differences between the prior art and the claims at issue; (iii) the level of ordinary skill in the pertinent

art; and (iv) so called “secondary” considerations, including, long felt need, unexpected results, commercial success, and failure of others. Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966).

On April 30, 2007, the U.S. Supreme Court issued a unanimous decision concerning obviousness. KSR Int’l Co. v. Teleflex, Inc., -- S.Ct. -- , 2007 WL 1237837 (2007). In KSR, the Supreme Court rejected the Federal Circuit’s “rigid” application of the “teaching, suggestion and motivation” test and reaffirmed an objective, common sense application of the Graham factors. Moreover, the Court reaffirmed numerous principles that have direct applicability to this matter, and did so by noting a number of “flaws” in the Federal Circuit’s obviousness analysis. First, the Court reaffirmed the objective nature of an obviousness inquiry. Specifically, the Court stated:

In determining whether the subject matter of a patent is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under § 103.

KSR, 2007 WL 1237837, *15 (emphasis added).

In the present case, the objective reach of the claims is obvious. Both the LPW applications and the ‘481 Patent described hard chromium electroplating processes that expressly meet each and every limitation of the claims, except they do not expressly disclose a lead anode. It is undisputed, however, that the use of lead anodes in hard chromium electroplating has been known to those skilled in the

art since the 1920's. Moreover, Newby admitted in the Patents-in-Suit that the use of a lead anode was so well known that it formed "no part of this invention."

Therefore, objectively, the claims of the Patents-In-Suit are obvious.

Additionally, in KSR, the Supreme Court found error in the Federal Circuit's conclusion that a patent claim cannot be proved obvious by a showing that the combination of elements was "obvious to try." Id. In so doing, the Court noted:

Where there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103.

Id. (emphasis added).

In the present matter, in 1987, Newby was faced with the problem of HEEF 25 causing excessive corrosion to customers' lead anodes. HEEF 25 had been formulated with MSA as the alkyl sulfonic acid. Also, at that time, however, Newby knew that four other alkyl sulfonic acids had high efficiency without causing low current density etching. These acids had been described in the LPW applications and the '481 Patent. More particularly, Newby knew from Table II of the '481 Patent that MDSA had the same high efficiency as MSA. Therefore, it was certainly "obvious" for Newby "to try" MDSA to determine whether that alkyl sulfonic acid had less lead anode corrosion than MSA. The fact that MDSA

resulted in less corrosion is, in Justice Kennedy's words, the "product not of innovation but of ordinary skill and common sense." The law does not award patents for "ordinary skill" or for "common sense."

In KSR, the Supreme Court also noted that a more flexible application of the Federal Circuit's "teaching, suggestion and motivation" test may be consistent with a proper obviousness inquiry. Id. at *16. Consequently, this Court may consider whether there existed a "teaching, suggestion or motivation" in the prior art.

The LPW applications contained four MDSA examples, each describing various attributes of an electroplating process using MDSA. Most notably, Example 6 of Atotech's English translation (withheld from the USPTO) describes a test concerning "the corrosion or chemical attack on steel test pieces." Notably, the chemistry containing MDSA (Electrolyte 2) had the lowest rate of corrosion. Therefore, the LPW reference contains a "suggestion" to combine MDSA with a lead anode if one skilled in the art were interested in trying to reduce corrosion.⁶

⁶ It is expected that Atotech will try to draw a distinction between chemical attack on the cathode and chemical attack on the anode. According to Atotech, one apparently has no relationship to the other. The Supreme Court, of course, has warned against such a "rigid," nonsensical approach. Moreover, Atotech's expert has admitted that both electrodes (the anode and cathode) are immersed in the plating solution and that it is the plating solution that "attacks" or "corrodes" the electrodes. (Ex. 42, 170-73).

Finally, in KSR, the Supreme Court rejected the Federal Circuit's conclusion that the patent owner's expert testimony created a genuine issue of fact, requiring denial of a motion for summary judgment. Specifically, the Court held:

In considering summary judgment on that question the district court can and should take into account expert testimony, which may resolve or keep open certain questions of fact. That is not the end of the issue, however. The ultimate judgment of obviousness is a legal determination. Where, as here, the content of the prior art, the scope of the patent claim, and the level of ordinary skill in the art are not in material dispute, and the obviousness of the claim is apparent in light of these factors, summary judgment is appropriate.

Id. at *19 (emphasis added).

Similarly, in the present matter, Mr. Altmayer's opinion cannot be used to create a material dispute because the content of the prior art, the scope of the patent claim and the level of ordinary skill in the art are not in material dispute. All that remains is the Court's legal judgment that the claims are obvious.

C. THE PATENTS-IN-SUIT ARE UNENFORCEABLE DUE TO ATOTECH'S INEQUITABLE CONDUCT

Patent applicants are required to prosecute applications with candor, good faith, and honesty. Molins PLC v. Textron, Inc., 48 F.3d 1172, 1178 (Fed. Cir. 1995). A breach of this duty can arise from an affirmative misrepresentation of a material fact, failure to disclose material information, or submission of false material information, coupled with an intent to deceive. Molins, 48 F.3d at 1178. A party asserting that a patent is unenforceable must prove materiality and intent

with clear and convincing proof. Kingsdown Med. Consultants, Ltd. v. Hollister, Inc., 863 F.2d 867, 872 (Fed. Cir. 1988). If established, the Court must determine if equity warrants a finding of inequitable conduct. Paragon Podiatry Lab., Inc. v. KLM Labs., Inc., 984 F.2d 1182, 1189 (Fed. Cir. 1993). This requires a careful balancing; when the misrepresentation or withheld information is highly material, a lesser quantum of proof is needed to establish the requisite intent. Id.

In evaluating materiality, the Federal Circuit has consistently referred to the standard set forth in PTO Rule 56. Molins, 48 F.3d at 1178. From 1977 to 1992, that rule defined information as “material” when “there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent.” Id. In 1992, the PTO changed Rule 56 to provide that information is material to patentability when it is not cumulative and (1) establishes by itself or in combination with other information a *prima facie* case of unpatentability of a claim, or (2) refutes or is inconsistent with a position taken by the applicant in either opposing an argument for unpatentability or asserting an argument of patentability. Id. “[C]lose cases should be resolved by disclosure.” GFI, Inc. v. Franklin Corp., 265 F.3d 1268, 1274 (Fed. Cir. 2001).

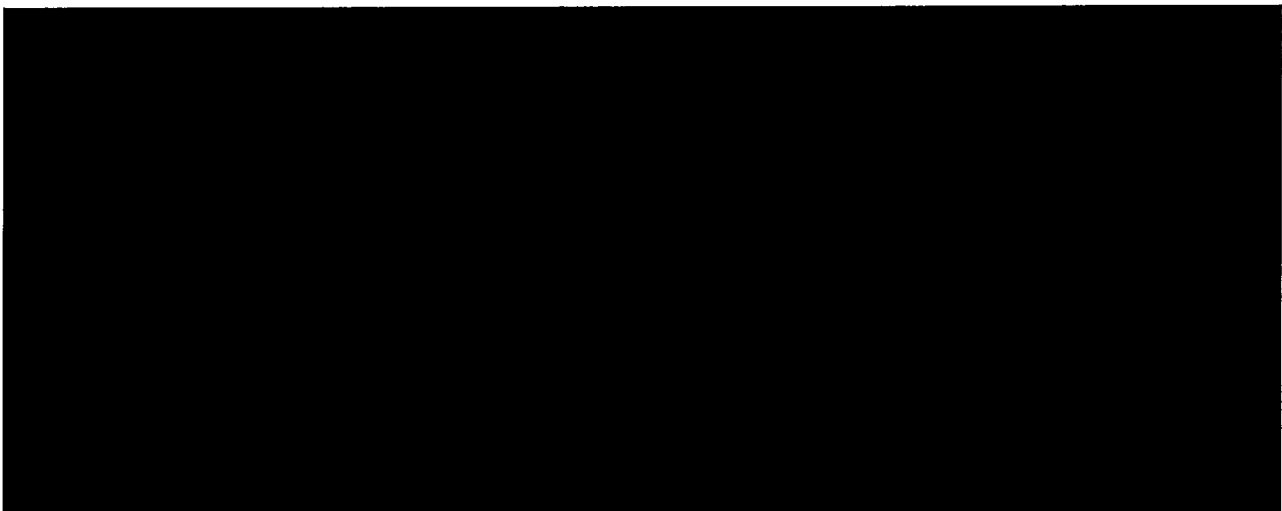
Intent need not be proven by direct evidence; it is most often proven by a showing of acts, the natural consequence of which is presumably intended by the actor. Molins, 48 F.3d at 1180. Proof of high materiality and applicant’s

knowledge of that materiality will make it difficult for the applicant to show good faith to overcome an inference of intent to mislead. Semiconductor Energy Lab., Co., Inc. v. Samsung Elec. Co., Ltd., 204 F.3d 1368, 1375 (Fed. Cir. 2000).

1. The Patents-at-Issue are unenforceable as a result of Atotech's purposeful failure to disclose the LPW references to the USPTO.

In the present matter, Atotech knew of the LPW applications before filing the application leading to the Patents-In-Suit. Thereafter, Atotech was "reminded" of the LPW references on innumerable occasions. Atotech, however, never disclosed the LPW references during a prosecution that spanned nearly six years. Nor did Atotech disclose the English translation found in its files.

Significantly, the LPW applications were material to the claimed point of novelty of the Patents-at-Issue, namely MDSA's low corrosion property. Moreover, the disclosure of the LPW references would have prevented Atotech from making certain patentability arguments, including the "invention" was a



from the materiality of the LPW references to MDSA plating baths. Consequently,

Atotech failed to disclose the LPW references with knowledge of their materiality, and thus, must have intended the natural consequences of its actions.

a. The LPW references were highly material to patentability.

The law concerning the disclosure of prior art cited in related foreign applications is clear. PTO Rule 56 provides: “[t]he Office encourages applicants to carefully examine: (1) Prior art cited in search reports of a foreign patent office in a counterpart application.” 37 C.F.R. §1.56(a)(1). The Manual of Patent Examining Procedure (“MPEP”) is explicit:

Applicants have a duty to bring to the attention of the Office any material prior art or other information cited or brought to their attention in any related foreign application. The inference that such prior art or other information is material is especially strong where it is the only prior art cited or where it has been used in rejecting the claims in the foreign application.

MPEP §2001.06(a) (4th ed., Oct. 1981) (emphasis added).

In Molins, the Federal Circuit affirmed these principles of candor in a factually identical context. 48 F.3d at 1180 The applicant became aware of prior art during the prosecution of a foreign counterpart application. As here, the prior art was used to reject related claims. Despite this, the Molins applicant did not disclose the prior art to the USPTO. In affirming a finding of inequitable conduct, the Federal Circuit held that an inference of materiality is “especially strong” when the prior art was used to reject related foreign claims. Id.

In the present matter, there exists that same “especially strong” inference of materiality. In December 1987, Atotech was “reminded” of the LPW reference as a result of its prosecution of the EPO counterpart application to the ‘481 Patent. Specifically, a European Search Report dated December 3, 1987 listed the “whole document” of the LPW reference as relevant. On July 28, 1988, the EPO issued a rejection of the foreign counterpart of the ‘481 Patent based on the LPW reference.

Similarly, during the EPO counterpart application to the Patents-at-Issue, the EPO issued a Search Report on September 14, 1993, identifying the LPW reference as “particularly relevant if taken alone.”⁷ Moreover, on May 3, 1994, the EPO issued a rejection, relying in part, on the LPW reference as invalidating the claims. Consequently, as of May 3, 1994, Atotech knew: (1) the LPW reference was listed on two European search reports, and (2) the EPO had rejected as invalid the claims of the foreign counterparts of the ‘481 Patent and the Patents-at-Issue based on the LPW reference.

In addition to the “especially strong” inference permitted by Molins, the LPW reference on its own terms is highly material to patentability of the Patents-at-Issue and to the patentability arguments made before the PTO. First, the LPW reference discloses in four out of eight examples, the chromium plating bath

⁷ In the foreign application, Attorney Robert Henn was listed as agent for Atochem, Atotech’s predecessor. At the same time, Attorney Henn was also one of the attorneys prosecuting the Patents-in-Suit before the USPTO.

claimed in the Patents-at-Issue, namely: (1) chromic acid, (2) sulfuric acid, and (3) MDSA. Moreover, the LPW examples described a number of beneficial attributes of MDSA baths, including low corrosion. All of these matters were material to Atotech's claimed inventive activity.

Finally, the LPW reference was highly material to Atotech's patentability arguments. Ultimately, the Examiner allowed the Patents-in-Suit based upon Atotech's arguments (and affidavit) concerning long felt industry need, unexpected results, and an alleged lack of teachings that would suggest that MDSA might have a corrosion minimizing quality. These arguments would not have been possible if the LPW reference had been properly brought to the attention of the Examiner. The LPW reference was published in 1985 in four European countries—England, France, Germany, and Sweden. The industry was, thus, well aware as of August 1985, that MDSA had a number of beneficial qualities, that one quality was low corrosion, and that the corrosion rate with MDSA was comparable to conventional plating baths. Given this, there can be only one rationale reason for Atotech's failure to disclose the LPW reference to the PTO, and that is deception.

b. The LPW reference was not cumulative to information already before the PTO.⁸

⁸ MacDermid expects Atotech to hinge its good faith explanation for its failures on the argument that the LPW references were "cumulative" to the '481 Patent. In this regard, MacDermid notes that the "non-cumulative" aspect of inequitable conduct only came into existence in 1992, when the USPTO amended Rule 56. Before that time, "materiality" was defined by whether there was a "substantial

When evaluating whether uncited prior art is more material than that before the PTO, the court should consider “similarities and differences between the prior art and the claims of the patent.” Halliburton Co. v. Schlumberger Tech. Corp., 925 F.2d 1435, 1441 (Fed. Cir. 1991). When uncited prior art contains a more complete combination of features than anything else before the PTO, then the uncited prior art is not cumulative. Molins, 48 F.3d at 1180.

In this case, the ‘481 Patent was certainly the most relevant prior art before the PTO. The LPW references, however, were more relevant than the ‘481 Patent. As noted above, the LPW references dedicated half of their examples to MDSA, described three specific MDSA formulations, and demonstrated various beneficial properties of MDSA. Most significantly, the LPW reference disclosed that MDSA formulations had the benefit of low corrosion, and that the MDSA corrosion rate was slightly less than a conventional plating bath.

In contrast to LPW reference’s description of the numerous benefits of MDSA, the ‘481 Patent only listed MDSA as one of the “Sulfonic Acids of the invention” and then later described MSA as the “preferred” sulfonic acid. The ‘481 Patent also failed to include specific MDSA formulations, whereas the LPW reference contained three such formulations in four examples. The ‘481 Patent

likelihood” that a “reasonable examiner” would consider the information “important.” Therefore, Atotech’s expected explanation cannot justify its failures between 1989 and 1992.

also failed to describe any beneficial attributes of MDSA formulations, and most notably, contained no hint of MDSA's low corrosion property. Atotech also secured a MDSA Supply Agreement by licensing the UK LPW application to a third party. Moreover, as noted, the LPW reference was material to Atotech's arguments for patentability. Consequently, the LPW reference was not cumulative and Atotech owed a duty to disclose the reference to the USPTO.

c. Atotech intended to deceive the USPTO.

"A patentee facing a high level of materiality and clear proof that it knew or should have known of that materiality, can expect to find it difficult to establish 'subjective good faith' to prevent the drawing of an inference of intent to mislead." Critikon, Inc. v. Becton Dickinson Vascular Access, Inc., 120 F.3d 1253, 1257 (Fed. Cir. 1997). "Failure to cite to the PTO a material reference cited elsewhere in the world justifies a strong inference that the withholding was intentional." Molins, 48 F.3d at 1182 (emphasis added). Deceptive intent is also properly inferred when an applicant fails to disclose material information that would have precluded assertions made to the PTO. Bruno Indep. Living Aids, Inc. v. Acorn Mobility Svcs., Ltd. 394 F.3d 1348, 1353-54 (Fed. Cir. 2005) (novelty argument not available had applicant disclosed material information); LaBounty Mfg., Inc. v. U.S. Intern. Trade Com'n, 958 F.2d 1066, 1076 (Fed. Cir. 1992) (same); GFI, 265

F.3d at 1275 (same). Findings of deceptive intent are appropriate on summary judgment in the proper case. Paragon, 984 F.2d at 1191-1192.

Certainly, the present matter is one of those proper cases for inferring deceptive intent on summary judgment. During almost 6 years of prosecution, the LPW reference was identified on two EPO search reports and was used twice by the EPO to reject the foreign counterparts of the '481 Patent and the Patents-at-Issue. Nevertheless, Atotech never disclosed the LPW reference to the U.S. Examiner. As in Molins, Atotech's failures justify a "strong inference" that the withholding was intentional.

Moreover, the LPW reference was directly material to the claimed novelty of the Patents-at-Issue and Atotech's patentability arguments. Specifically, the LPW reference was material to whether the selection of MDSA to reduce lead anode corrosion was novel. Furthermore, the LPW reference was highly relevant to Atotech's patentability arguments, namely whether an unsatisfied industry need truly existed before the claimed invention, whether the claimed invention was truly a "*desideratum*" in the industry, whether the results were truly "unexpected," and whether an "artisan of ordinary skill" would truly be "groping for answers where at present there seem to be none." Atotech's conduct of withholding the LPW reference while making such patentability arguments unquestionably justifies a second strong inference of culpable intent to mislead and deceive the USPTO.

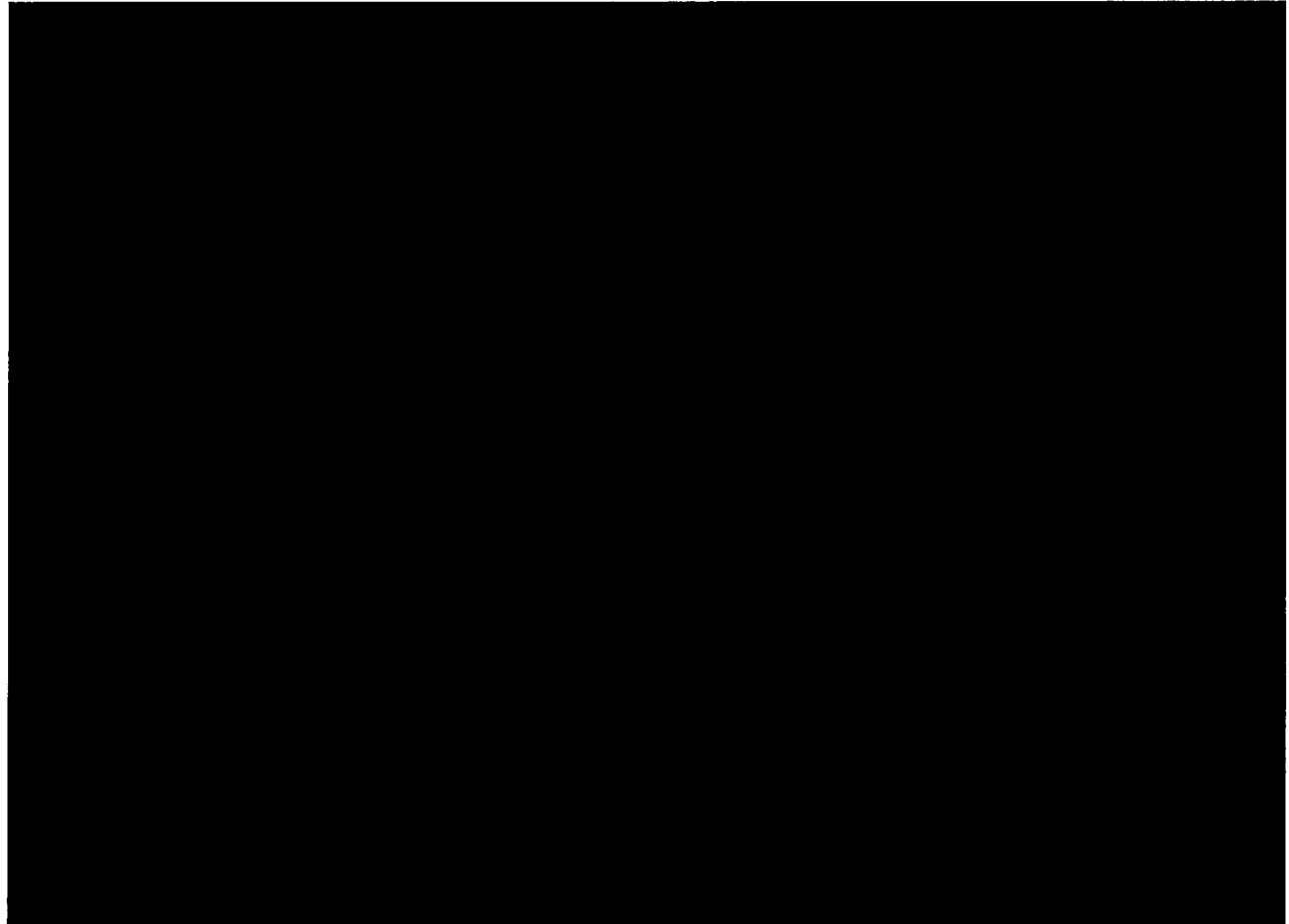
Additionally, Newby and his attorney elected to visit the U.S. Examiner in May 1992. Newby brought two lead anodes to the meeting, but failed to bring a copy of the UK LPW application or the English translation in his possession. Given his knowledge of the LPW references, Newby rather remarkably represented to the Examiner that the highly corroded anode was the result of a “prior art” bath, whereas the pristine anode was the result of his “inventive” MDSA bath. Newby never advised the Examiner that, in fact, his “inventive” MDSA bath was fully disclosed in the LPW reference, that the reference was published in four European countries in 1985, or that it demonstrated MDSA’s low corrosion. Instead of acting with such candor, Newby subsequently filed an affidavit with the USPTO once again positing that the MDSA bath was his invention. When he was asked whether he explained to the Examiner that the “real nice” looking lead anode was in a bath described in the LPW reference, Newby testified, in relevant part:

I think what I told you, I think what is correct, is I don’t recall what I told him and discussed with him. *I recall – we were trying to obtain a patent on it.*

(Ex. 47, 261) (emphasis added).

As if these facts were not compelling enough, the chronology of events in this matter demands a finding that Atotech intended to deceive the USPTO. In 1987, two years before filing its patent application, Atotech was aware of the LPW references because it had received patent rights in the LPW references.

Subsequently, in 1989, Atotech changed the formulation of HEEF 25 by substituting MDSA for MSA, and continued to sell HEEF 25. Therefore, after the



Suit, Atotech financially benefited from the materiality of the LPW references to MDSA plating baths and yet never disclosed their existence to the USPTO.

If any doubt at all remained concerning Atotech's design to deceive the USPTO, that ended when Atotech failed to disclose the LPW reference when it was cited directly against the EPO counterpart of the Patents-at-Issue. The EPO search report was forwarded September 14, 1993. On May 3, 1994, the EPO rejected the claims of the foreign counterpart application based on the LPW

reference. Despite all of this, Atotech failed to disclose the existence of the LPW references or provide the English translation in its possession.

Based on the foregoing, the inference of culpable intent is inescapable.

Rational individuals intend the natural consequences of their actions.

2. Atotech misled the USPTO by providing a materially incomplete description of the LPW Anode reference, while failing to provide an English translation of the German reference in its possession.

The faxed English translation of the LPW Anode reference is dated July 1, 1988, and contains Newby's hand-written note: "LPW anode patent application." The LPW Anode application discloses the use of a lead anode with plating baths containing "alkyl sulfonic acids." Newby acknowledged that he knew MDSA was an "alkyl sulfonic acid." Moreover, the patent application was filed by "Blasberg-Oberflächentechnik" – not LPW-Chemie. Yet, Newby wrote on the document "LPW anode patent application," undoubtedly because the reference specifically states: "Hard-chromium electrolytes containing alkyl sulfonic acids are known from German Pat. Appl. 34 02 554." "German Pat. Appl. 34 02 554" is the German version of the LPW reference that describes MDSA plating baths. Therefore, on or about July 1, 1988, Newby knew that the LPW Anode application described an electroplating process using a lead anode with a MDSA plating bath.

Once again, however, neither the actual reference nor the English translation was disclosed to the USPTO during six years of prosecution. Instead, Atotech

elected to provide a materially incomplete summary of the German reference in the specification. Specifically, Atotech represented that the reference only relates to MSA baths, when, in fact, the reference describes “alkyl sulfonic acids” and then refers to the plating baths of the LPW references, which include MDSA baths.

Atotech is not the first patentee to have attempted such purposeful deception. See Semiconductor Energy Lab v. Samsung Elec., 204 F.3d 1368, 1374 (Fed. Cir. 2000) (providing materially incomplete description of a foreign reference while withholding a full English translation had to be a conscious choice). Given the conscious choices involved in this series of events, an inference of deceptive intent is unavoidable.

3. Atotech further engaged in inequitable conduct by evading a direct inquiry from the US Examiner.

As a result of this litigation, it is now undisputed that Newby used a lead anode in the research underlying the ‘481 Patent. It is further undisputed that lead anodes were used in industrial applications of the ‘481 Patent. Yet, Newby and Atotech refused to advise the USPTO of these facts, in response to a pointed inquiry by the US Examiner.

During prosecution, the Examiner issued an Office Action that provided in relevant part:

Further [the inventor] is a coinventor of the primary reference and is in perfect position to affirm or deny that lead anodes were used [the ‘481 patent] and that lead anodes are used in industrial applications of

[the 481 patent] process. Applicant is reminded of his duty of candor in dealings with the PTO.

(Ex. 13, C4) (emphasis added).

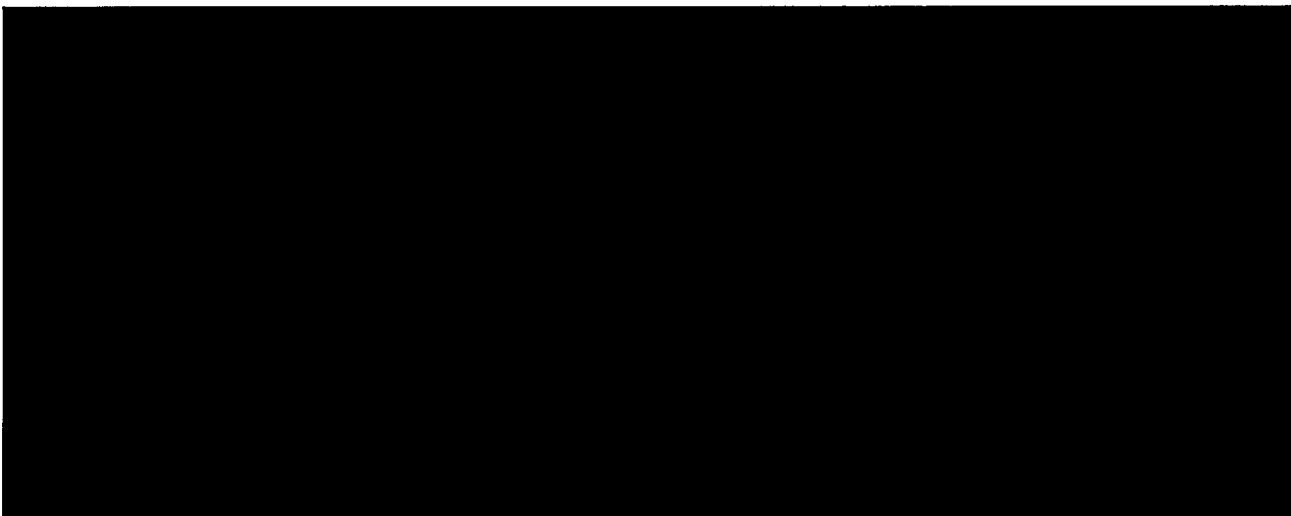
In his Response, Newby affirmed that he was in the perfect position to affirm or deny that lead anodes were used in the '481 Patent. However, he refused to directly answer the Examiner's inquiry with affirmative "yes's" and, instead, evaded the inquiry by only acknowledging that lead anodes were known in the industry. Under oath in this case, Newby has now admitted that he, in fact, used a lead anode in the '481 patent and that lead anodes were used in industrial applications of the '481 patent. Newby's refusal to provide honest and non-evasive answers to the Examiner's inquiry, particularly, after being reminded of his duties to the Patent Office, constituted a gross deviation of his duty of candor.

Thereafter, Newby capitalized on his refusal to acknowledge the use of a lead anode when he met with the U.S. Examiner in May 1992. At that time, Newby falsely suggested that only MSA baths were used with lead anodes in the prior art and further that his discovery of using MDSA with lead anodes was not in the prior art. These deceptive representations were then documented in an affidavit relied upon by the USPTO to issue the '813 Patent.⁹

⁹ The egregiousness of this conduct is heightened by Atotech's refusal to disclose the LPW references or produce the two English translations in its possession.

4. Atotech purposefully misrepresented the reason MSA is “corrosion producing” and MDSA is not.

In his research, Newby initially determined that lead anode corrosion was caused by a “chloride-like” impurity in the commercial supply of MSA. Newby, then, utilized chemical and electrochemical purification techniques to remove the impurity, and successfully reduced the lead anode corrosion. One method was a “high current density anodic” technique, the results of which Newby described in his lab notebook as “super.” Newby filed a patent application on this technique on April 12, 1988 and secured issuance of the patent on March 7, 1989. These activities occurred after Newby discovered the claimed invention in January 1988.



Despite this, Atotech pursued the Patents-in-Suit from November 1989 to September 1995, based upon the premise that it was the type of the alkyl sulfonic acid that caused lead anode corrosion, not the presence or absence of impurities in the raw materials. Specifically, the Patents-in-Suit posit that alkyl monosulfonic acids are “corrosion producing” whereas alkyl polysulfonic acids are not.

Moreover, in the specification of the Patents-in-Suit, Newby represented that impurities in MSA were not the source of the lead anode corrosion problem.

These false, affirmative representations concerning the claimed invention constitute the most egregious form of inequitable conduct, rendering the Patents-in-Suit unenforceable. Cargill, Inc. v. Canbra Foods, Ltd., 476 F.3d 1359, 1366 (Fed. Cir. 2007) (“[a] reasonable examiner would certainly want to consider test data that is directly related to an important issue of patentability, along with the applicant’s interpretation of that data”).

Based upon the undisputed facts, Atotech is guilty of inequitable conduct and this Court should summarily render the Patents-at-Issue unenforceable.

D. MacDermid’s Sale of ChromKlad 2500 Does Not Infringe the Claims of the ‘175 Patent.

As noted, Claim 1 and all of the dependent claims of the ‘175 Patent are written in Jepson format whereby the preamble defines not only the context of the claimed invention, but also its scope. Rowe, 112 F.3d at 479; M.P.E.P. § 608.01(m). To read on a Jepson claim, the alleged infringer’s product must read on every element of the prior art set forth in the preamble, as well as every element of the “improvement” the claim describes. Id.

In the present case, Claim 1 of the ‘175 Patent contains a preamble that requires, *inter alia*, a plating bath containing an alkylsulfonic acid that is characterized by corrosion of the lead anode. Claim 1 also contains an

“improvement” limitation that requires some portion of the corrosion-producing alkylsulfonic acid remain in the plating bath. (See MacDermid’s Opening Markman Brief, Section III.B.2). Therefore, in order for Claim 1 of the ‘175 Patent to be infringed, the infringing bath must contain a corrosion-producing alkylsulfonic acid. There is no dispute that MacDermid’s Chromklad 2500 fails to meet both of these claim limitations.

MacDermid’s Chromklad 2500 only contains chromic acid, sulfuric acid and MDSA. Chromklad 2500 does not contain MSA or any other corrosion-producing sulfonic acid. Consequently, MacDermid’s sale of Chromklad 2500 cannot infringe any of the claims of the ‘175 Patent.

E. MacDermid is entitled to Summary Judgment with Respect to Atotech’s Trade Secret Allegations Concerning Formulas.

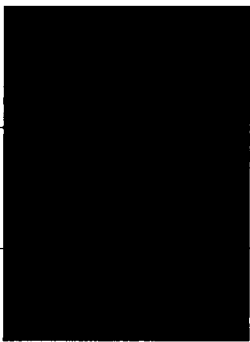
1. There is no genuine issue of material fact that atotech cannot prove a legally protectable trade secret.

The questions in this case are three-fold: (1) whether Atotech’s claimed formulas constitute “secrets” under South Carolina’s trade secret laws, (2) whether Atotech’s effort to enforce a state’s trade secret laws in this factual context conflicts with federal patent laws, and (3) whether a genuine issue exists as to whether MacDermid misappropriated a trade secret. As detailed below, Atotech has not met its burden, nor can it, of demonstrating that a legally protectable trade secret has been misappropriated.


a. Under South Carolina law, Atotech's HEEF 25 formula cannot constitute a trade secret when MacDermid's formulas fall within the public disclosures of the '481 Patent and the LPW applications.

Federal law requires that all ideas in general circulation be dedicated to the common good unless they are protected by a *valid* patent. See e.g. Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, 230 (1964). In order to qualify as a trade secret, the information "must be secret, and must not be of public knowledge or of a general knowledge in the trade or business." Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 475 (1974); see also Carolina Chem. Equip. Co., Inc. v. Muckenfuss, 471 S.E.2d 721, 724 (S.C. App. 1996) (in determining whether something is a trade secret, one must consider the extent to which the information is known outside of his business).

In the present case, Atotech claims trade secret protection for its HEEF 25 process formulation. MacDermid's process formulation, however, explicitly falls within the scope of the teachings of the '481 Patent and the LPW applications:

	<u>ChromKlad 2500</u>	<u>'481 Patent</u>	<u>LPW Application</u>	<u>LPW Ex. No. 6</u>
Chromic Acid		150 to 450 g/l (Preferably 200 to 300 g/l)	150 to 400 g/l (Preferably 200 g/l)	300 g/l
Sulfuric Acid		1 to 5 g/l (Preferably 1.5 to 3.5 g/l)	2 to 15 g/l (Preferably 1.2% in relation to CrO ₃)	3.3 g/l
MDSA		1 to 18 g/l (Preferably 1.5 to 12 g/l)	More than 0.5 g/l	3 g/l

Similarly, MacDermid's replenishment products are taught but not claimed in the Patents-in-Suit:

ChromKlad 2500 L and S	Patents-in-Suit ('813 Patent, Col. 7, L42-50)
	From about 1 to about 40 grams per kilogram of CrO ₃

The United States Supreme Court has held "for more than 100 years" that information contained in an expired patent becomes, by operation of law, public knowledge and, thus, cannot be a trade secret. See Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 165 (1989); Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, 230 (1964); Scott Paper v. Marcalus Mfg. Co., 326 U.S. 249, 256 (1945); Singer Mfg. Co. v. June Mfg. Co., 163 U.S. 169, 185-86 (1896). In addition, subject matter disclosed but not claimed is dedicated to the public. Maxwell v. J. Baker, Inc., 86 F.3d 1098, 1106-07 (Fed. Cir. 1996).

Atotech cannot have a protectable trade secret in alleged secrets that are in the public domain by operation of federal law.¹⁰ Therefore, MacDermid is free to use that which is fully disclosed to the public. See Carolina Chem., 471 S.E.2d at 724.

¹⁰ Incredulously, Atotech's 30(b)(6) designee for trade secret issues was unaware of the formula for the operating bath of HEEF 25 and HEEF 25 R. Moreover, Atotech's expert did not perform an analysis of MacDermid's ChromKlad 2500 operating bath, and compare MacDermid's operating bath to an operating bath of Atotech's HEEF 25 process. Yet Atotech seeks to claim that MacDermid has misappropriated its trade secret. There can be no dispute that MacDermid's operating bath falls within publicly disclosed information.

b. Atotech's effort to enforce a state's trade secret laws in this factual context conflicts with federal patent laws.

Even assuming, *arguendo*, that Atotech's alleged formulas were somehow protected under South Carolina law, Atotech's misappropriation claim would still fail because it conflicts with federal patent laws. The Supreme Court has summarized its preemption approach as follows: "States may not offer *patent-like protection* to intellectual creations which would otherwise remain unprotected as a matter of federal law." Bonito Boats, 489 U.S. at 156 (emphasis added); see also Dow Chem. Co. v. Exxon Corp., 139 F.3d 1470, 1475 (Fed. Cir. 1998) (state laws that "seek to offer patent-like protection to intellectual property inconsistent with the federal scheme are preempted").

The Supreme Court's decision in Sears, Roebuck & Co., is instructive on this point. The Court there stated:

[T]he patent system is one in which uniform federal standards are carefully used to promote invention while at the same time preserving free competition. Obviously a State could not, consistently with the Supremacy Clause of the Constitution, extend the life of a patent beyond its expiration date or give a patent on an article which lacked the level of invention required for federal patents. To do either would run counter to the policy of Congress of granting patents only to true inventions, and then only for a limited time. Just as a State cannot encroach upon the federal patent laws directly, it cannot, under some other law, give protection of a kind that clashes with the objectives of the federal patent laws.

Sears, 376 U.S. at 230.

Similarly, in the present case, South Carolina's trade secret statute cannot give Atotech "patent-like" protection to a formulation or process that would otherwise remain unprotected by federal law. Bonito Boats, 489 U.S. at 156. Such a result is "too great an encroachment on the federal patent system to be tolerated." See Sears, 376 U.S. at 232.

c. There is no genuine dispute that MacDermid did not copy Atotech's product formulas.

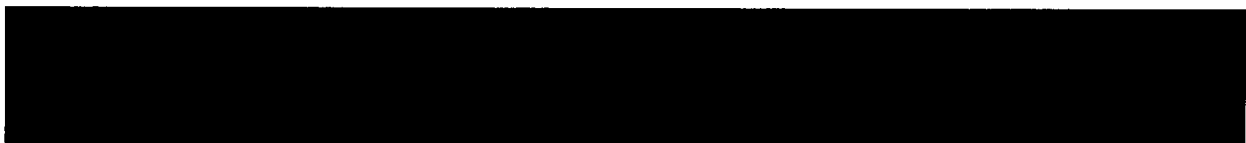
Even if Atotech had a protectable trade secret and its claims were not preempted by federal law, its misappropriation claim would still fail as a matter of law because Atotech cannot establish that MacDermid copied its formulas. There is no dispute, nor can there be, that MacDermid's formulas are significantly different from Atotech's formulas.

A misappropriation claim will not lie where the defendant's formula is not identical to the plaintiff's formula. See Water & Energy Sys. Tech., Inc. v. Keil, 974 P.2d 821, 822 (Utah 1999). In Water & Energy, the plaintiff, who produced water treatment chemicals, alleged that its former employee had misappropriated its chemical formulas, had associated with a business competitor, and was soliciting the plaintiff's customers. Id. The trial court, having determined that the chemical formulas of the two products were "very similar," issued a preliminary injunction that barred the salesman from contacting the plaintiff's customers. Id.

On appeal, the Supreme Court vacated the injunction, concluding that the plaintiff had “failed to establish that [the employee] copied its prices or its products and supplied them to” his new employer. Id. Specifically, the Court held that even though the two chemical formulas contained some similarities, they were not identical and, therefore, the plaintiff could not establish a prima facie case. Id.

Similarly, in Carolina Chem., the plaintiff and defendant were competitors in producing industrial cleaning equipment and supplies. Carolina Chemical claimed that the defendants had misappropriated trade secrets, including theft of product formula. 471 S.E.2d at 722 at 297. The Court of Appeals of South Carolina, noting that the plaintiff’s “chemical expert analyzed and compared the products, finding them similar *but not identical*,” ordered that a directed verdict be rendered in favor of the defendant because there was “no evidence” of misappropriation of a trade secret. Id. at 725 (emphasis added).

The evidence is undisputable that MacDermid products are substantially different from Atotech products. Specifically, the analysis performed by Atotech’s



	<u>HEEF 25R</u>	<u>2500L</u>
<u>CrO₃</u>		
<u>MDSA</u>		

In addition, Atotech's expert performed an analysis comparing formulations of Atotech's HEEF 25C and ChromKlad 2500C. Notably, the analysis performed by Atotech's expert demonstrated that the formula for the make-up product were even further apart:

	<u>HEEF 25C</u>	<u>2500C</u>
<u>CrO₃</u>		
<u>MDSA</u>		

As in Keil and Carolina Chem., MacDermid's formula for its replenisher and the make-up product are significantly different. Consequently, the differences between Atotech's and MacDermid's formula demonstrate a lack of misappropriation as a matter of law.

When taken together, the fact that (i) MacDermid's process formulation is taken directly from expired patents, and (ii) MacDermid's products are definitively different from the Atotech products, leads to the inescapable conclusion that MacDermid did not, and in fact could not, misappropriate a legally protectable trade secret owned by Atotech.

IV. CONCLUSION

For all the forgoing reasons, this Court should grant MacDermid's Motion for Summary Judgment.

Dated: May 18, 2007

s/Donald A. Robinson
Donald A. Robinson